



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application

Inventor(s): Shek Fai Lau and John Paul Reeves
Appln. No.: 10/622,842
Confirm. No.: 4757
Filed: July 18, 2003
Title: Robot Capable of Detecting an Edge

PATENT APPLICATION

Art Unit: 3661
Examiner:

Customer No. 23910

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence is being deposited in the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop Missing Parts, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on 11/3/03.

Jeffrey R. Kurin (Attorney Signature)
Jeffrey R. Kurin, Reg. No. 41,133
Signature Date: 11/3/03

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.56

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

It is requested that the information identified in this statement be considered by the Examiner and made of record in the above-identified application. This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56. If this is a continuation, divisional or continuation-in-part application, it is understood that the Examiner will consider all information which was considered by the Office in a parent application. MPEP §609. Such information therefore is not listed herein unless it is desired that the information be printed on a patent issuing from the subject application.

Enclosed with this statement are the following:

- ☒ Form PTO-1449. The Examiner is requested to initial the form and return it to the undersigned in accordance with M.P.E.P. §609.
- ☒ The present application is being/was filed after June 30, 2003. In accordance with the pre-official gazette waiver of 37 CFR 1.98 (a)(2)(i) posted at: pac/dapp/opla/preognotice/idswouscopies.htm, copies of cited U.S. patents and publications are not enclosed. However, copies of cited foreign patent documents and non-patent literature are enclosed in accordance with 37 CFR 1.98(a)(2), as still required, except for those items designated by an asterisk (*), which were previously submitted by the applicant in a parent application, from which benefit under 35 U.S.C. §120 is claimed, with an *Information Disclosure Statement* submitted in the parent application which complies with the September 8, 2000 or subsequent revision of 37 C.F.R. §1.98(a-c), as allowed under 37 C.F.R. §1.98(d)(1).

— The present application was filed prior to June 30, 2003. A copy of each cited document as required by 37 C.F.R. §1.98 is enclosed, except for those items designated by an asterisk (*), which were previously submitted by the applicant in a parent application, from which benefit under 35 U.S.C. §120 is claimed, with an *Information Disclosure Statement* submitted in the parent application which complies with the September 8, 2000 or subsequent revision of 37 C.F.R. §1.98(a-c), as allowed under 37 C.F.R. §1.98(d)(1).

— If any of the cited/submitted documents is in a foreign language, a concise explanation of relevance is provided pursuant to 37 C.F.R. §1.98(a)(3)(i). For foreign language documents cited in a search report by a foreign patent office, the requirement for a concise explanation of relevance is satisfied by the submission herewith of an English language version of the search report. MPEP §609A(3). If a written English-language translation of a non-English language document, or portion thereof, is within the possession, custody or control of, or is readily available to any individual designated in §1.56(c), a copy of the translation accompanies this statement, 37 C.F.R. §1.98(a)(3)(ii), and satisfies the requirement for a concise explanation of relevance, MPEP §609A(3).

— ***PTA Statement under 37 C.F.R. §1.704(d).*** Each item of information contained in the *Information Disclosure Statement* was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the *Information Disclosure Statement*.

This statement should be considered because:

✓ **37 C.F.R. §1.97(b).** This statement qualifies under 37 C.F.R. §1.97, subsection (b) because:

- (1) It is being filed within three months of the filing date of an application other than a continued prosecution application under § 1.53(d);
-- OR --
- (2) It is being filed within 3 months of entry of a national stage;
-- OR --
- (3) It is being filed before the mailing date of the first Office Action on the merits,
-- OR --
- (4) It is being filed before the mailing date of the first Office Action after the filing of a Request for Continued Examination under 37 C.F.R. §1.114.

— **37 C.F.R. §1.97(c).** Although it may not qualify under subsection (b), this statement qualifies under 37 C.F.R. §1.97, subsection (c) because:

- (1) It is being filed before the mailing date of a FINAL Office Action, a Notice of Allowance, or an action that otherwise closes prosecution in the subject application, whichever occurs first.

-- AND (check at least one of the following) --

- (1) It is accompanied by a STATEMENT as set forth in 37 C.F.R. §1.97(e).
-- OR --
- (2) It is accompanied by the \$180 fee set forth in 37 C.F.R. §1.17(p).

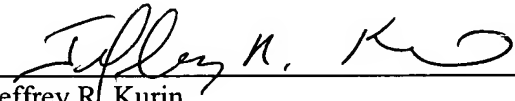
— 37 C.F.R. §1.97(d). Although it may not qualify under subsection (b) or (c), this statement qualifies under 37 C.F.R. §1.97, subsection (d) because:

- (1) It is being filed on or before payment of the Issue Fee;
-- AND --
- (2) It is accompanied by a STATEMENT as set forth in 37 C.F.R. §1.97(e);
-- AND --
- (3) It is accompanied by the \$180 fee set forth in 37 C.F.R. §1.17(p).

✓ **Fee Authorization.** The Commissioner is hereby authorized to charge any deficiencies or credit any overpayment to Deposit Account No. 06-1325.

Respectfully submitted,

Date: 11/3/03

By: 
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Form PTO-1449 (Substitute)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		Attorney Docket Number SHPR-01006US5 SRM/JRK		Serial Number 10/622,842	
Information Disclosure Statement BY APPLICANT <i>(Use several sheets if necessary)</i>				Applicant Shek Fai Lau et al.			
				Filing Date July 18, 2003		Group Art Unit 3661	
U.S. PATENTS							
Examiner Initial		Patent Number	Issue Date	First Named Inventor	Class	Subclass	Filing Date
	1.	D251,628	04/17/79	McQuarrie et al.	D21	150	09/12/77
	2.	D251,900	04/14/81	Lanusse	D21	150	10/12/78
	3.	D262,643	01/12/82	Wong	D21	150	12/14/79
	4.	D287,986	01/27/87	Matsui	D21	150	08/02/84
	5.	D293,344	12/22/87	Shiraishi	D21	150	11/07/85
	6.	D297,749	09/20/88	Rodis-Jamero	D21	150	10/30/85
	7.	D437,368S	02/06/01	Tsai	D21	637	03/17/00
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	10.	4,736,826	04/12/88	White et al.	191	12.2A	04/22/85
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	22.	6,415,203	07/02/02	Inoue et al.	700	245	03/12/01
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	25.	6,519,506	02/11/03	Osawa	700	245	12/19/01
	26.	6,522,239	02/18/03	Ihara et al.	345	441	08/04/98
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Examiner Initial		Patent Application Publication Number	Publication Date	Applicant
	28.*	2001/0047226 A1	11/29/01	Saijo et al.

PENDING U.S. PATENT APPLICATIONS

Examiner Initial		Application Number	Filing Date	First Named Inventor	Petition to Expunge? Yes No

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document Number	Publication Date	Country	Class	Subclass	Translation Yes No

OTHER DOCUMENTS (Include author (if any), title, publisher and place of publication, date and pertinent pages)

	29.*	Yoshihiro Kuroki, "A Small Biped Entertainment Robot," 2001 International Symposium on Micromechatronics and Human Science 0-7803-7190-9/01 ©2001 IEEE.					
	30.*	B. Mohamed, F. Gravez, F.B. Ouedzou, "Emulation of the Human Torso Dynamic Effects During Walking Gait," IEEE International Workshop on Robot and Human Interactive Communication 0-7803-7222-0/01©2000 IEEE.					

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31.*	P. Sardain and G. Bessonnet, "Gait Analysis of a Human Walker wearing Robot Feet as Shoes," Proceeding of the 2001 IEEE International Conference on Robotics & Automation, Seoul, Korea, May 21-26, 2001, 0-7803-6475-9/01©2001 IEEE.
32.*	Hiroshi Ishiguro, Tetsuo Ono, Michita Imai, Takeshi Maeda, Takayuki Kanda, Ryohei Nakatsu, "Robovie: A robot generates episode chains in our daily life," "Proceedings of the 32nd ISR (International Symposium on Robotics), 19-21 April 2001.
33.*	"Introducing the iRobot-LE™", iRobot Corporation: The iRobot-LE, http://www.irobot.com/ir/index.htm , downloaded December, 5, 2000, 1 page.
34.*	"Here are just a few of the uses of the iRobot-LE™," iRobot Corporation: The iRobot-LE: Many uses, http://www.irobot.com/ir/iR_many_uses.htm , downloaded Dec. 5, 2000, 2 pages.
35.*	"The Package", iRobot Corporation: The iRobot-LE: the Package, http://www.irobot.com/ir/iR_package.htm , downloaded Dec. 5, 2000, 2 pages.
36.*	The Power to Transport Yourself Anywhere in the World", iRobot Corporation: The iRobot-LE: Take Control, http://www.irobot.com/ir/iR_take_control.htm , downloaded December 5, 2000, 2 pages.
37.*	"All You Need is a High Speed Internet Connection", iRobot Corporation: The iRobot-LE: Requirements, http://www.irobot.com/ir/iR_requirements.htm , downloaded Dec. 5, 2000, 2 pages.
38.*	Questions and Answers About the iRobot-LE™, iRobot Corporation: The iRobot-LE: Questions and Answers, http://www.irobot.com/ir/qa.htm , downloaded Dec. 5, 2000, 6 pages.
39.*	"iRobot-LE™ Technical Specifications", iRobot Corporation: The iRobot-LE: Technical Specifications, http://www.irobot.co/ir/tech.htm , downloaded Dec. 5, 2000, 2 pages.
40.*	Hamilton, Anita, "Robots Take Over Toyland", Time for Kids, February 23, 2001, page 7.
41.*	Goldman, Lee, "Keeping Up with the Jetsons," Forbes, October 16, 2000, 1 page (pg. 248).

Examiner

Date Considered

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*1 = Copy not submitted because it was submitted in prior application SN 10/284,110, filed Oct. 30, 2002, relied on under 35 USC §120.

*2 = Copy not submitted because it was submitted in prior application SN 09/881,420, filed Jun. 14, 2001, relied on under 35 USC §120.